



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/816,033	04/01/2004	Hans-Joachim Beyer	7545	9259

7590 05/11/2005

Attn: Arlene J. Powers
Gauthier & Connors, LLP
Suite 3300
225 Franklin Street
Boston, MA 02110

EXAMINER

COOLEY, CHARLES E

ART UNIT	PAPER NUMBER
----------	--------------

1723

DATE MAILED: 05/11/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/816,033

Applicant(s)

BEYER ET AL.

Examiner

Charles E. Cooley

Art Unit

1723

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 15 December 2004.
- 2a) ☒ This action is FINAL. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-21 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1-10 and 16-19 is/are allowed.
- 6) ☒ Claim(s) 11-15, 20 and 21 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 01 April 2004 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

FINAL OFFICE ACTION

Priority

1. Receipt is acknowledged of papers submitted under 35 U.S.C. § 119, which papers have been placed of record in the file.

Drawings

2. The drawings are objected to because of the following informalities:
 - a. For the reasons on the PTO-948 form submitted with the last office action.
 - b. In Figure 4, reference character "39" near "41" should be changed to --39b-- and reference character "39" near "37" should be changed to --39a-- to agree with the specification.
 - c. Figure 5 should be revised in a like manner to Figure 4.Correction is required.
3. Applicant should verify that (1) all reference characters in the drawings are described in the detailed description portion of the specification and (2) all reference characters mentioned in the specification are included in the appropriate drawing Figure(s) as required by 37 CFR 1.84(p)(5).

INFORMATION ON HOW TO EFFECT DRAWING CHANGES

Replacement Drawing Sheets

Drawing changes must be made by presenting replacement figures which incorporate the desired changes and which comply with 37 CFR 1.84. An explanation of the changes made must be presented either in the drawing amendments, or remarks,

Art Unit: 1723

section of the amendment. Any replacement drawing sheet must be identified in the top margin as "Replacement Sheet" (37 CFR 1.121(d)) and include all of the figures appearing on the immediate prior version of the sheet, even though only one figure may be amended. The figure or figure number of the amended drawing(s) must not be labeled as "amended." If the changes to the drawing figure(s) are not accepted by the examiner, applicant will be notified of any required corrective action in the next Office action. No further drawing submission will be required, unless applicant is notified.

Identifying indicia, if provided, should include the title of the invention, inventor's name, and application number, or docket number (if any) if an application number has not been assigned to the application. If this information is provided, it must be placed on the front of each sheet and centered within the top margin.

Annotated Drawing Sheets

A marked-up copy of any amended drawing figure, including annotations indicating the changes made, may be submitted or required by the examiner. The annotated drawing sheets must be clearly labeled as "Annotated Marked-up Drawings" and accompany the replacement sheets.

Timing of Corrections

Applicant is required to submit acceptable corrected drawings within the time period set in the Office action. See 37 CFR 1.85(a). Failure to take corrective action within the set period will result in ABANDONMENT of the application.

If corrected drawings are required in a Notice of Allowability (PTOL-37), the new drawings **MUST** be filed within the **THREE MONTH** shortened statutory period set for reply in the "Notice of Allowability." Extensions of time may **NOT** be obtained under the provisions of 37 CFR 1.136 for filing the corrected drawings after the mailing of a Notice of Allowability.

Specification

4. The disclosure is objected to because of the following informalities:
 - a. the amendment made to page 2 in the last response fails to comply with 37 CFR 1.121 as no markings are shown to depict the changes made. A replacement paragraph with the required markings relative to the prior version is required.

Appropriate correction is required.

5. The abstract is acceptable.
6. The title is acceptable.

Claim Objections/Remarks

7. Claims 5 and 6 are objected to because of the following informalities:
 - a. Claim 5 and 6: the recited "at least one housing" is considered equivalent to the "pressure tight housing" recited in amended claim 1.

8. Claims 11-15 are objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim.

Applicant is required to cancel the claim(s) or amend the claim(s) to place the claim(s) in proper dependent form.

- a. Claim 11 repeats subject matter found in amended claim 1.
- b. Claim 14 is believed drawn to the embodiment of Figures 4 and 5 that lack the scraper disk. Since claim 1 was amended to include a scraper disk, the subject matter of claim 14 (which depends from claim 1) is deemed mutually exclusive to the embodiment recited in claim 1.
- c. Claim 15 is believed drawn to the embodiment of Figures 4 and 5 that lack the scraper disk. Since claim 1 was amended to include a scraper disk, the subject matter of claim 15 (which depends from claim 1) is deemed mutually exclusive to the embodiment recited in claim 1.

Correction is required.

Claim Rejections - 35 USC § 102

9. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

10. Unamended claims 20-21 are rejected under 35 U.S.C. 102(b) as being anticipated by Probstmeyer (US 3,854,658).

The patent to Probstmeyer discloses the recited solid bowl helical conveyor centrifuge in Fig. 1 including a rotating drum 10 which includes a centrifuge space Q with a rotatable screw 22, 22a; an inlet tube 39 for supplying a material for centrifugation into the centrifuge space; at least one liquid discharge 17 and at least one solids discharge 20; wherein the liquid discharge 17 and/or the solid discharge 20 having at least one or more openings in a rotating part of the solid bowl helical conveyor centrifuge, in particular through openings 17, 20 in the drum wall (Fig. 1); the openings 17 and 20 being each covered by a housing 37, 38 respectively which encloses the drum 10 of the solid bowl helical conveyor centrifuge in only some sections; between the housings 37, 38 and the drum and/or other rotating elements of the solid bowl helical conveyor centrifuge at least one or more rubber gaskets are provided as seen in Fig. 1 and as denoted by the drawing symbol for rubber per MPEP 608.02; the gaskets are bearing ring/annular gaskets (Fig. 1); the openings 17 being located in an axial end face 16, 18 of the drum wall; the openings 20 being located in the circumferential wall of the drum and point radially outward; the housings 37, 38

Art Unit: 1723

extending over the area of the openings 17, 20 on the drum; the housing 37 is designed with a step (to the right of 22a) and extends over a step (proximate 16) of the drum; the housings 37, 38 being stationary (col. 3, lines 54-55 and lines 63-64); the openings 20 being for solids discharge in a tapered section of the drum 10; the openings 17 being for liquid discharge in the form of an overflow opening in the end face 16, 18 of the drum facing away from the solids discharge 20, whereby these overflow openings 17 are covered by one of the housings 37; wherein one of the gaskets is in contact with an axial end face 16a of the drum and another of the gaskets is in contact with a cylindrical drum head (proximate 16).

11. Unamended claims 20-21 are rejected under 35 U.S.C. 102(b) as being anticipated by Hopfe (US 3,880,346).

The patent to Hopfe discloses the recited solid bowl helical conveyor centrifuge in Fig. 1 including a rotating drum 10 which includes a centrifuge space with a rotatable screw 17; an inlet tube 21 for supplying a material for centrifugation into the centrifuge space; at least one liquid discharge 10' and at least one solids discharge 27; wherein the liquid discharge 10' and/or the solid discharge 27 having at least one or more openings in a rotating part of the solid bowl helical conveyor centrifuge, in particular through openings 10', 27 in the drum wall (Fig. 1); the openings 10' and 27 being each covered by a housing section 29, 30 and 28, 30 respectively which encloses the drum 10 of the solid bowl helical conveyor centrifuge in only some sections; between the housings and the drum and/or other rotating elements of the solid bowl helical conveyor centrifuge at least one or more rubber gaskets 33 are provided; the gaskets are bearing

Art Unit: 1723

ring/annular gaskets (Fig. 1); the openings 10' being located in an axial end face 10a of the drum wall; the openings 27 being located in the circumferential wall of the drum and point radially outward; the housings extending over the area of the openings 10', 27 on the drum; the housings being stationary; the openings 27 being for solids discharge in a tapered section of the drum 10; the openings 10' being for liquid discharge in the form of an overflow opening in the end face 10a of the drum facing away from the solids discharge 27, whereby these overflow openings are covered by one of the housings 29, 30; wherein the gasket 33 is arranged between the inside circumference of the axial wall 30 of the housing and that of the drum 10.

* * *

With regard to the above rejections, the operational and functional language of the claims (e.g., the language of claim 20, lines 9-10, and claim 21, lines 9-10) has been considered but fails to impart or invoke any further structure or means (per 35 USC 112, sixth paragraph and MPEP 2181) to the pending apparatus claims which defines over the applied prior art. The pending apparatus claims lack any structure to generate a pressurized housing within the recited pressure range or to generate the recited temperature and the examiner considers that one skilled in the art would readily recognize that the housings of the applied prior art are indeed capable of being pressurized or having the temperature thereof modified (as recognized by Scherer (US 4,708,711) at col. 5, line 55 through col. 6, line 11). Consequently, since all of the claimed structure is met by the applied prior art, the rejections under 35 USC 102 are deemed proper.

Allowable Subject Matter

12. Claims 1-10, and 16-19 are allowed since the prior art of record does not teach or fairly suggest the subject matter added to claim 1 via amendment.

Response to Amendment

13. Applicant's arguments filed 15 DEC 2004 have been fully considered but they are not deemed to be persuasive.

Applicant is reminded that "[a] claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference." *Verdegaal Bros. v. Union Oil Co. of California*, 814 F.2d 628, 631, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987). "The identical invention must be shown in as complete detail as is contained in the ... claim." *Richardson v. Suzuki Motor Co.*, 868 F.2d 1226, 1236, 9 USPQ2d 1913, 1920 (Fed. Cir. 1989). The elements must be arranged as required by the claim, but this is not an ipsissimis verbis test, i.e., identity of terminology is not required. *In re Bond*, 910 F.2d 831, 15 USPQ2d 1566 (Fed. Cir. 1990).

Turning to the rejections of the claims under 35 U.S.C. § 102(b), it is noted that the terminology in a pending application's claims is to be given its broadest reasonable interpretation (*In re Zletz*, 893 F.2d 319, 321, 13 USPQ2d 1320, 1322 (Fed. Cir. 1989)) and limitations from a pending application's specification will not be read into the claims (*Sjolund v. Musland*, 847 F.2d 1573, 1581-82, 6 USPQ2d 2020, 2027 (Fed. Cir. 1988)). Anticipation under 35 U.S.C. § 102(b) is established only when a single prior art

Art Unit: 1723

reference discloses, either expressly or under the principles of inherency, each and every element of a claimed invention. See *Constant v. Advanced Micro-Devices, Inc.*, 848 F.2d 1560, 1570, 7 USPQ2d 1057, 1064 (Fed. Cir.), cert. denied, 488 U.S. 892 (1988); *RCA Corp. v. Applied Digital Data Sys., Inc.*, 730 F.2d 1440, 1444, 221 USPQ 385, 388 (Fed. Cir. 1984). Moreover, anticipation by a prior art reference does not require either the inventive concept of the claimed subject matter or the recognition of properties that are inherently possessed by the prior art reference. *Verdegaal Brothers Inc. v. Union Oil co. of California*, 814 F.2d 628, 633, 2 USPQ2d 1051, 1054 (Fed. Cir. 1987), cert. denied, 484 U.S. 827 (1987). A prior art reference anticipates the subject matter of a claim when that reference discloses each and every element set forth in the claim (*In re Paulsen*, 30 F.3d 1475, 1478-79, 31 USPQ2d 1671, 1673 (Fed. Cir. 1994) and *In re Spada*, 911 F.2d 705, 708, 15 USPQ2d 1655, 1657 (Fed. Cir. 1990)); however, the law of anticipation does not require that the reference teach what Applicant is claiming, but only that the claims "read on" something disclosed in the reference. *Kalman v. Kimberly-Clark Corp.*, 713 F.2d 760, 772, 218 USPQ 781, 789 (Fed. Cir. 1983), cert. denied, 465 U.S. 1026 (1984) (and overruled in part on another issue), *SRI Intel v. Matsushita Elec. Corp. Of Am.*, 775 F.2d 1107, 1118, 227 USPQ 577, 583 (Fed. Cir. 1985). Also, a reference anticipates a claim if it discloses the claimed invention such that a skilled artisan could take its teachings in combination with his own knowledge of the particular art and be in possession of the invention. See *In re Graves*, 69 F.3d 1147, 1152, 36 USPQ2d 1697, 1701 (Fed. Cir. 1995), cert. denied, 116

Art Unit: 1723

S.Ct. 1362 (1996), quoting from *In re LeGrice*, 301 F.2d 929, 936, 133 USPQ 365, 372 (CCPA 1962).

With respect to the applied prior art under 35 U.S.C. § 102(b), the examiner has explicitly demonstrated how the references disclose each and every element set forth in the claims and how the pending claims read on the disclosure of the reference, hence the rejection is considered proper.

The examiner notes no distinct arguments were made to the patentability of unamended claims 20 and 21 so the previous rejections are still considered valid and made final. Unlike amended claim 1, it is not seen how claims 20 and 21 (not amended with the last response) define over the applied prior art.

Conclusion

14. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 C.F.R. § 1.136(a).

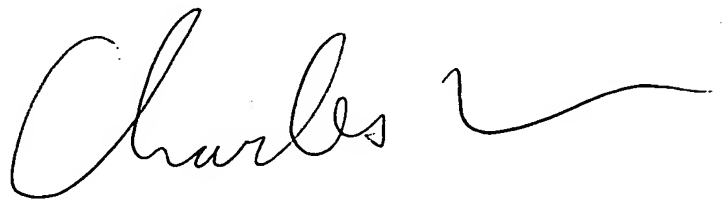
A SHORTENED STATUTORY PERIOD FOR RESPONSE TO THIS FINAL ACTION IS SET TO EXPIRE THREE MONTHS FROM THE DATE OF THIS ACTION. IN THE EVENT A FIRST RESPONSE IS FILED WITHIN TWO MONTHS OF THE MAILING DATE OF THIS FINAL ACTION AND THE ADVISORY ACTION IS NOT MAILED UNTIL AFTER THE END OF THE THREE-MONTH SHORTENED STATUTORY PERIOD, THEN THE SHORTENED STATUTORY PERIOD WILL EXPIRE ON THE DATE THE ADVISORY ACTION IS MAILED, AND ANY EXTENSION FEE PURSUANT TO 37 C.F.R. § 1.136(a) WILL BE CALCULATED FROM THE

Art Unit: 1723

MAILING DATE OF THE ADVISORY ACTION. IN NO EVENT WILL THE STATUTORY PERIOD FOR RESPONSE EXPIRE LATER THAN SIX MONTHS FROM THE DATE OF THIS FINAL ACTION. ANY RESPONSE FILED AFTER THE MAILING DATE OF THIS FINAL REJECTION WILL BE SUBJECT TO THE PROVISIONS OF MPEP 714.12 AND 714.13.

15. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Charles E. Cooley whose telephone number is (571) 272-1139. The examiner can normally be reached on Mon-Fri. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

A handwritten signature in black ink, appearing to read "Charles", followed by a long, horizontal, wavy line extending to the right.

Charles E. Cooley
Primary Examiner
Art Unit 1723

9 May 2005